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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,323	12/07/2001	Hyoung Yoon Kim	P-0304	4253
34610 7590 08/10/2007 KED & ASSOCIATES, LLP P.O. Box 221200 Chantilly, VA 20153-1200			EXAMINER SAMS, MATTHEW C	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 08/10/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Office Action Summary</b></p>	<p><b>Application No.</b></p> <p align="center">10/005,323</p>	<p><b>Applicant(s)</b></p> <p align="center">KIM, HYOUNG YOON</p>	
	<p><b>Examiner</b></p> <p align="center">Matthew C. Sams</p>	<p><b>Art Unit</b></p> <p align="center">2617</p>	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 April 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 8-10, 14, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-10, 14, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 5/7/2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. The drawings were received on 5/7/2007. These drawings are accepted.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 8-10, 14, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sinha (US-6,970,474) in view of Lunsford et al. (US 2002/0065868 hereinafter, Lunsford).

Regarding claim 1, Sinha teaches a system for utilizing a mobile communication terminal as a wireless headset, comprising:

a base unit (Fig. 1 [100]) adapted to access an Internet phone service; (Fig. 1 [120 & 140]) and

a mobile communication terminal (Fig. 1 [150]) adapted to function as a wireless headset of the base unit (Col. 5 lines 18-25) when the base unit accesses the Internet phone service (Col. 4 lines 32-34), wherein the mobile communication terminal comprises:

a built-in wireless communication capability configured to enable wireless communication between a plurality of communication devices; (Col. 6 lines 11-18)

a mobile station modem to check whether the terminal has been set to the headset mode (Col. 6 lines 13-18) and, when the check indicates that the headset mode has been set, a control program drives the mobile station modem to alter input/output ports for communicating speech signals relating to an Internet phone service call between the terminal and base unit through the built-in wireless communication capability. (Col. 5 lines 18-25)

Sinha teaches automatically changing connections so that the access to the network is transparent to the user no matter which service is being used (Col. 5 lines 18-25), but differs from the claimed invention by not explicitly reciting a key input function which operates with a displayed menu to change a mode of terminal between a general call mode and a headset mode.

In an analogous art, Lunsford teaches a mobile computing device that includes a plurality of communication links with a user interface operable to select the communication mode to be used. (Page 2 [0012]) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the communication device of Sinha after modifying it to incorporate the user interface for selecting between communication modes of Lunsford. One of ordinary skill in the art would have been motivated to do this since this allows a user to manually select a specific communication mode that is cheaper than the other during specific times of the day or the user may wish to conserve the number of minutes left for the month in the mobile communication plan.

Sinha in view of Lunsford obviously teaches a mobile station modem is responsive to said key input function to alter said input/output ports (Lunsford Page 2 [0012]) for communicating speech signals relating to the Internet phone service call between the terminal and base unit when said key input function designates the headset mode, (Sinha Col. 4 lines 32-34 and Lunsford Page 2 [0012])

the mobile station modem is response to said key input function to alter said input/output ports to communicate speech signals with an external mobile communication network when said key input function designates the general call mode (Lunsford Page 2 [0012] and Sinah Fig. 2 [20 & 150']), and

when the key input function sets the mode of the terminal to the general call mode, the terminal remains in the general call mode independent of a location of the terminal relative to the base unit. (Lunsford Fig. 6B and Page 2 [0012])

Regarding claim 2, Sinha in view of Lunsford teaches the base unit comprises a wireless communication card (Sinha Fig. 1 [110]) configured to receive a speech signal from the mobile communication terminal (Sinha Fig. 1 [150]) and to transmit the received speech signal to a sound card of the base unit. (Sinha Fig. 1 [120] and Col. 5 lines 7-17)

Regarding claim 3, Sinha in view of Lunsford teaches the mobile communication terminal (Sinha Fig. 1 [150]) further comprises:

a speaker; (Sinha obvious, Col. 6 line 15)

a microphone; (Sinha obvious, Col. 6 line 15) and

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a wireless communication device configured to transmit a speech signal from the microphone to the base unit using a predetermined wireless communication protocol and to output a speech signal received from the base unit to the speaker. (Sinha obvious Col. 5 lines 18-25 *i.e.* the transceiver in the base unit operates the same way as a base station would for the mobile telephone)

Regarding claim 4, Sinha teaches a system for utilizing a mobile communication terminal as a wireless headset, comprising:

a personal computer (Fig. 1 [100]) adapted to access an Internet phone service; (Fig. 1 [120 & 140] and Col. 5 lines 7-18) and

a mobile communication terminal (Fig. 1 [150]) with a built-in wireless communication capability (Col. 5 lines 18-25) configured to enable wireless communication between a plurality of communication devices (Col. 6 lines 11-18), wherein the mobile communication terminal is configured to function as a wireless headset of the PC (Col. 5 lines 18-25) when the PC accesses the Internet phone service (Col. 4 lines 32-34), wherein the mobile communication terminal comprises:

a speaker; (Sinha obvious, Col. 6 line 15)

a microphone; (Sinha obvious, Col. 6 line 15)

a wireless communication device configured to transmit a speech signal from the microphone to the base unit using a predetermined wireless communication protocol and to output a speech signal received from the base unit to the speaker (Sinha obvious Col. 5 lines 18-25 *i.e.* the transceiver in the base unit operates the same way as a base station would for the mobile telephone)

a mobile station modem to check whether the terminal has been set to the headset mode (Col. 6 lines 13-18) and, when the check indicates that the headset mode has been set, a control program drives the mobile station modem to alter input/output ports for communicating speech signals relating to an Internet phone service call between the terminal and base unit through the built-in wireless communication capability. (Col. 5 lines 18-25)

Sinha teaches automatically changing connections so that the access to the network is transparent to the user no matter which service is being used (Col. 5 lines 18-25), but differs from the claimed invention by not explicitly reciting a key input function which operates with a displayed menu to change a mode of terminal between a general call mode and a headset mode.

In an analogous art, Lunsford teaches a mobile computing device that includes a plurality of communication links with a user interface operable to select the communication mode to be used. (Page 2 [0012]) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the communication device of Sinha after modifying it to incorporate the user interface for selecting between communication modes of Lunsford. One of ordinary skill in the art would have been motivated to do this since this allows a user to manually select a specific communication mode that is cheaper than the other during specific times of the day or the user may wish to conserve the number of minutes left for the month in the mobile communication plan.

Sinha in view of Lunsford obviously teaches a mobile station modem is responsive to said key input function to alter said input/output ports (Lunsford Page 2 [0012]) for communicating speech signals relating to the Internet phone service call between the terminal and base unit when said key input function designates the headset mode, (Sinha Col. 4 lines 32-34 and Lunsford Page 2 [0012])

the mobile station modem is response to said key input function to alter said input/output ports to communicate speech signals with an external mobile communication network when said key input function designates the general call mode (Lunsford Page 2 [0012] and Sinah Fig. 2 [20 & 150']), and

when the key input function sets the mode of the terminal to the general call mode, the terminal remains in the general call mode independent of a location of the terminal relative to the base unit. (Lunsford Fig. 6B and Page 2 [0012])

Regarding claim 5, the limitations of claim 5 are rejected as being the same reason set forth above in claim 4.

Regarding claim 8, Sinha in view of Lunsford teaches the built in wireless communication capability of the mobile communication terminal is compatible with a built in wireless communication capability of the PC. (Sinha Col. 5 lines 7-17)

Regarding claim 9, Sinha in view of Lunsford teaches the built in wireless communication capabilities of the mobile communication terminal and the PC are compatible with a predetermined wireless communication protocol. (Sinha Col. 5 lines 17-25 and Col. 6 lines 9-44)



Regarding claim 10, Sinha in view of Lunsford teaches the built in wireless communication capabilities of the mobile communication terminal and the PC and the predetermined wireless communication protocol are configured to enable wireless communication amongst a plurality of predetermined components positioned within a given proximity of one another. (Sinha Fig. 1 [100, 150 & 155] and Fig. 2)

Regarding claim 14, Sinha in view of Lunsford teaches the wireless communication device (Sinha Fig. 1 [150]) of the mobile communication terminal is configured to communicate with the PC using a predetermined wireless communication protocol which is configured to enable wireless communication amongst a plurality of predetermined components positioned within a given proximity of one another. (Sinha Fig. 2 [150, 150', 20 & 100])

Regarding claim 19, Sinha in view of Lunsford teaches the mobile station modem performs an additional function of periodically checking whether the mobile communication terminal has been set to the headset mode (Lunsford Fig. 6B), and when the periodic check indicates that the headset mode has been set, a control program drives the mobile station modem to alter the input/output ports of the terminal for communicating speech signals of an Internet phone service call between the mobile communication terminal and personal computer through the built-in wireless communication capability. (Sinha Col. 5 lines 18-25 and Col. 6 lines 13-18)

Regarding claim 20, Sinha in view of Lunsford teaches the base unit is a personal computer. (Sinha Col. 5 lines 7-11)

***Response to Arguments***

4. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Sams whose telephone number is (571)272-8099. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571)272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MCS  
8/3/2007

  
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SUPERVISORY PRIMARY EXAMINER